

WHAT IS CLAIMED IS:

1     1.   An arrangement for generating control commands for  
2         actuating at least one of flaps and slats of an aircraft,  
3         comprising:

4             manually operable first and second command input  
5             levers;

6             rotatable first and second sensor disks;

7             a first linkage connecting said first command input  
8             lever to said first sensor disk, and a second linkage  
9             connecting said second command input lever to said second  
10            sensor disk, wherein said first and second linkages are  
11            adapted to transmit lever motions of said first and second  
12            command input levers respectively to limited rotation  
13            motions of said first and second sensor disks;

14            first and second groups of signal emitters  
15            respectively cooperating with said first and second sensor  
16            disks to emit command signals dependent on and responsive  
17            to respective rotational positions of said first and second  
18            sensor disks; and

19            a first control computer having inputs conductively  
20            connected to said first group of signal emitters to receive  
21            said command signals therefrom, and a second control  
22            computer having inputs conductively connected to said  
23            second group of signal emitters to receive said command  
24            signals therefrom, wherein said first and second control  
25            computers are respectively adapted to generate actuating  
26            signals for actuating at least one of flaps and slats of an

27 aircraft responsive to and dependent on said command  
28 signals, wherein said actuating signals are provided at  
29 outputs of said first and second control computers.

1 2. The arrangement according to claim 1, wherein said first  
2 command input lever, said first linkage and said first  
3 sensor disk form a first command input mechanical  
4 transmission path, wherein said second command input lever,  
5 said second linkage and said second sensor disk form a  
6 second command input mechanical transmission path, and  
7 wherein said first and second command input mechanical  
8 transmission paths are independently operable but  
9 functionally coupled with respect to each other.

1 3. The arrangement according to claim 1, further comprising  
2 actuators that are conductively connected to said outputs  
3 of said first and second control computers to receive said  
4 actuating signals therefrom, and at least one of flaps and  
5 slats mechanically connected to said actuators.

1 4. The arrangement according to claim 3, wherein said inputs  
2 of said control computer are electrically conductively  
3 connected to said signal emitters, and said actuators are  
4 electrically conductively connected to said outputs of said  
5 control computers.

1     **5.**    The arrangement according to claim 1, further comprising  
2            first and second handgrips arranged on respective free ends  
3            of said first and second command input levers, and wherein  
4            said first and second command input levers are arranged  
5            directly side-by-side adjacent each other or with one lever  
6            path of one of said levers inside another lever path of  
7            another of said levers, in a cockpit of the aircraft to  
8            enable common mutual manual grasping of said handgrips and  
9            common mutual operation of said levers.

1     **6.**    The arrangement according to claim 1, wherein said first  
2            and second command input levers are mechanically connected  
3            to each other by a mechanical connection.

1     **7.**    The arrangement according to claim 6, wherein said  
2            mechanical connection is designed and constructed to be  
3            disruptable so as to disconnect said levers by application  
4            of a manual force to one of said levers.

1     **8.**    The arrangement according to claim 6, wherein said  
2            mechanical connection can be manually disengaged or  
3            disconnected so as to disconnect said levers from one  
4            another.

1     **9.**    The arrangement according to claim 1, wherein said first  
2            and second command input levers are frictionally coupled to  
3            each other by a frictional coupling.

1    **10.** The arrangement according to claim 9, wherein said  
2       frictional coupling is designed and constructed to be  
3       overcome so as to decouple said levers from one another by  
4       application of a manual force to one of said levers.

1    **11.** The arrangement according to claim 1, wherein said first  
2       and second command input levers are not connected to each  
3       other.

1    **12.** The arrangement according to claim 1, wherein said command  
2       input levers, said linkages and said sensor disks are  
3       designed and constructed so that any jamming of one of said  
4       sensor disks can be overpowered by a manual operating force  
5       applied to said command input levers.

1    **13.** The arrangement according to claim 1, further comprising a  
2       slide guide arrangement by which said first and second  
3       command input levers are slidingly guided, including at  
4       least one guide slot with detent recesses on one side and  
5       baffle protrusions on another side thereof, and including  
6       a catch member that is connected to a respective one of  
7       said levers and is biased to detent into any selected one  
8       of said detent recesses.

1    **14.** The arrangement according to claim 1, further comprising a  
2       housing and at least one mechanical cover that positively  
3       movably covers or closes a slot through which said command  
4       input levers extend into said housing, wherein said

5 mechanical cover comprises at least one of a roller door,  
6 a lamellar door, a bellows, a slidable metal cover plate,  
7 and a slidable plastic cover plate.

1 **15.** The arrangement according to claim 1, wherein, in the event  
2 of one of said levers becoming jammed, the jammed one of  
3 said levers can be decoupled from a normal detent gate  
4 thereof by application of an increased manual operating  
5 force.